SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name: Glass Cleaner

Other means of identification
Synonyms: None

Details of the supplier of the safety data sheet
Company Name: ULINE
12575 Uline Drive
Pleasant Prairie, WI 53158
(800) 295-5510
http://www.uline.com/

Emergency telephone number
Emergency Telephone: Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This product has been classified in accordance with the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Appearance: Clear Blue
Physical state: Liquid
Odor: Ammonia

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific Treatment (See Section 4 on the SDS)

Hazards not otherwise classified (HNOC)

Other Information
Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
</table>

4. FIRST AID MEASURES

First aid measures

Skin Contact  
Wash off immediately with plenty of water. Wash skin with soap and water.

Eye contact  
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation  
Remove to fresh air.

Ingestion  
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms  
Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians  
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media  
Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Explosion data
Sensitivity to Mechanical Impact  None.
Sensitivity to Static Discharge  None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions  
Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions  
See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment  
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up  
Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE
Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>STEL: 400 ppm</td>
<td>TWA: 400 ppm</td>
<td>IDLH: 2000 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm</td>
<td>(vacated) TWA: 400 ppm</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 980 mg/m³</td>
<td>STEL: 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 500 ppm</td>
<td>STEL: 1225 mg/m³</td>
</tr>
<tr>
<td>Ammonia 7664-41-7</td>
<td>STEL: 35 ppm</td>
<td>TWA: 50 ppm</td>
<td>IDLH: 300 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 25 ppm</td>
<td>(vacated) TWA: 35 ppm</td>
<td>TWA: 25 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 27 ppm</td>
<td>TWA: 18 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 35 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 27 mg/m³</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol 112-34-5</td>
<td>TWA: 10 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalable fraction and vapor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls
Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses if handling large volume.

Skin and body protection
Wear protective gloves and protective clothing if needed.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Liquid
Appearance
Clear Blue
Color
Blue
Odor
Ammonia
Odor threshold
No Information available

Property          | Values             | Remarks • Method
---               | ---                | ---          |
pH                | 10.5 - 11.5        |             |
Specific Gravity  | 0.99               |             |
Viscosity         | < 25 cP @ 25°C     |             |
10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Maybe harmful by inhalation, ingestion, in contact with eyes and skin.

Inhalation
Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact
Avoid contact with eyes. Contact with eyes may cause irritation.

Skin Contact
Avoid contact with skin. Prolonged or repeated contact may dry skin and cause irritation.

Ingestion
Do not taste or swallow. May cause gastrointestinal irritation.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>= 1870 mg/kg (Rat)</td>
<td>= 4059 mg/kg (Rabbit)</td>
<td>= 72600 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Surfactant Blend</td>
<td>&gt; 5,000 mg/kg (rat)</td>
<td>= 3394 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Ammonia 7664-41-7</td>
<td>= 350 mg/kg (Rat)</td>
<td>-</td>
<td>= 2000 ppm (Rat) 4 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Sensitization
No Information available.

Germ cell mutagenicity
No Information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td></td>
<td>Group 3</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity
No Information available.

STOT - single exposure
No Information available.

STOT - repeated exposure
No Information available.

Target organ effects
EYES, Respiratory system, Skin.

Aspiration hazard
No Information available.

**Numerical measures of toxicity - Product Information**

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 99,787.00
ATEmix (inhalation-dust/mist) 312.40

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>1400000: 96 h Lepomis macrochirus mg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>13259: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Surfactant Blond</td>
<td>-</td>
<td>&gt;100: 96 h Fish mg/L LC50</td>
<td>-</td>
</tr>
<tr>
<td>Ammonia 7664-41-7</td>
<td>-</td>
<td>0.44: 96 h Cyprinus carpio mg/L LC50 1.5: 96 h Poecilia reticulata mg/L LC50 0.26: 4.6: 96 h Lepomis macrochirus mg/L LC50 5.9: 96 h Pimephales promelas mg/L LC50 static 1.19: 96 h Poecilia reticulata mg/L LC50 static 0.73: 2.3: 96 h Pimephales promelas mg/L LC50 1.17: 96 h Lepomis macrochirus mg/L LC50 flow-through</td>
<td>25.4: 48 h Daphnia magna mg/L LC50</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol 112-34-5</td>
<td>100: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>2850: 24 h Daphnia magna mg/L EC50 100: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

No Information available.

**Bioaccumulation**

Bioaccumulative potential.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>0.05</td>
</tr>
<tr>
<td>Ammonia 7664-41-7</td>
<td>-1.14</td>
</tr>
</tbody>
</table>

**Other adverse effects**

No Information available
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>Toxic Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT
Not regulated

TDG
Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA
Complies

DSL/NDSL
Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia 7664-41-7</td>
<td>100 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level.
pertaining to releases of this material

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia 7664-41-7</td>
<td>100 lb</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol 67-63-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ammonia 7664-41-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol 112-34-5</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**
EPA Pesticide Registration Number Not Applicable

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**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Yes</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**Issue Date** 18-Mar-2016  
**Revision Date** 18-Mar-2016  
**Revision Note** No Information available

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*End of Safety Data Sheet*